

some chapters the original (1971) artwork has been used; admittedly the principles governing cell design etc. have not changed but few pieces of apparatus are today designed around the rubber bung, or even the upmarket neoprene stopper! The chapters on voltammetry at stationary electrodes and on controlled potential electrolysis/coulometry are not very helpful for the beginner, class of '86. Mechanistic discussion is well out of date, as are the 'hints' on practical aspects. The recent references which have been added (typically up to 1982/83) often do not displace redundant material and an impression of cosmetic revision is given. One should not read now that '... polarography is almost always used to guide the preliminary selection of conditions for controlled potential electro-synthesis.' It is not, and, furthermore, polarography has become obsolete as a method for determining mechanism. It remains important in analytical chemistry, but this is only briefly dealt with in the chapter on polarography.

In summary, the volume is disappointing and we must hope that the next revision of what has been a most valuable series is more thorough.

J. H. P. Utley

Amazonia. Edited by Ghilleen T. Prance and Thomas E. Lovejoy. Pp. 442. Pergamon Press, Oxford. 1986. \$29.00.

From the first faltering steps of early European exploration to the present-day development activities of technological man, Amazonia has posed the classic Faustian Riddle in the conflict between potential permanent returns or immediate, if ephemeral, gains.

This book illustrates that the greatest treasure to be found in the rich fragility of Amazonia is the most obvious. Of the vast biological array of living organisms, some are as yet unidentified; many contribute important products to our daily lives; all demand sustained international concern for their survival.

Twenty-two authoritative chapters span the 3 sections of this volume; The Physical Setting, The Biology, and The Human Impact. Several nationalities are represented among the authors, each is a specialist working in the region. Refreshingly, each provides not only an indepth analysis of the subject – often impressively referenced – but also some reflection on the interaction of the specialism within the wider context of Amazonian science and anthropology.

The volume represents a unique reference source for the specialist, and a fascinating insight into the region for the generalist. It deserves a place on the bookshelves of both, and a prominent position in the library of all those concerned with resource management in the humid tropics.

G. K. Elliott

Genetic Manipulation of Streptomyces. A Laboratory Manual. By D. A. Hopwood et al. Pp. 356. Cold Spring Harbor Laboratory, New York, and originally The John Innes Foundation, Norwich. 1985. \$25.00.

This is an excellent book and is highly recommended for any laboratory working with *Streptomyces*. It provides a clear, detailed and comprehensive description of over 100 experimental procedures used for the genetic manipulation of this important bacterial genus and is presented in a way that will smooth the passage of the many newcomers to this field of research. As a source of experiments for undergraduate laboratory classes it has considerable potential. The manual is based on a successful EMBO laboratory course run by the John Innes Institute and brings together the technical know-how of 10 experts, mostly from that Institute.

Divided into eight chapters, the book starts with the preparation of organisms and phages and a description of *in vivo* genetic methods. The remaining six chapters cover the *in vitro* genetic procedures of DNA preparation, transformation, and transfection; DNA manipulation; cloning; radiolabelled DNA techniques; and RNA methodology. For each technique a step-by-step experimental protocol is provided, together with a list of materials and equipment and associated technical notes. The manual is completed by an extensive appendix listing media, strains, maps, and cloning vectors, together with about 100 references and a comprehensive index. While most of the methods describe those used for *S. coelicolor* and *S. lividans* they should be adaptable to other species.

D. A. Ritchie

Translational Control. Edited by Michael B. Mathews. Pp. 194. Cold Spring Harbor Laboratory, New York. 1986. Paperback \$27.00.

This book comprises 30 short articles by participants at a Cold Spring Harbor conference on the translational control of protein synthesis, held in November 1985. The commendably rapid publication ensures the book's value in informing workers in the field of the latest developments. Most of the articles are written clearly, with good introductory and summary paragraphs. There is an introductory chapter, outlining present knowledge of the mechanisms of translation and the major types of control. A substantial portion of the book should be informative to teachers, students, and research workers in other areas of biochemistry who already have a good understanding of the mechanism of protein synthesis in eukaryotic cells and wish to up-date their knowledge.

Some translational control mechanisms determine the overall amount of protein synthesized, whilst others are selective, regulating the synthesis of some proteins relative to others. Both types of regulation

are covered in this book, with most emphasis on the function and activity of initiation factors and on conditions that regulate the availability of messenger RNA molecules for translation. Most, but not all, the articles describe work with mammalian cells, including effects on translation of heat shock, viral infection, interferon, and changes in nutritional supply.

V. M. Pain.

A Textbook of Human Biology, 3rd Ed. By John K. Inglis. Pp. 422. Pergamon Press, Oxford. 1986. Hardback £19.95 (\$29.00), Flexicover £12.50 (\$18.75).

This book is a useful introductory text to human biology: topics introduced include evolution, cell chemistry, nutrition, anatomy and physiology, human genetics (an excellent chapter), and the health and disease of man. The book has apparently been significantly changed since the last edition.

About three-quarters of the book discusses normal anatomy and physiology using a traditional systems-orientated approach; eg. respiratory system, nervous system, etc. The later part of the book, which I feel is the more valuable and unusual part, discusses the causes of ill-health, methods of preventing and treating disease, and a chapter on birth and growth. The final chapter gives suggestions for practical work. The book is well illustrated but unfortunately no colour is used.

The level of information in the book is fairly basic. The style of writing also makes the book more suitable for younger (ie. school rather than college) students: the author uses 'we' widely in the text and at times verges on being prescriptive, when discussing personal hygiene for instance. My other reservation is that at times the information is not as up to date as one would hope for in a 1986 edition; for instance, in the discussion on virally-caused disease, there is no mention of AIDS. Similarly, the author mentions recording ECGs with a physiograph (!) and classifies diabetes as juvenile and maturity onset which are terms not widely used now.

Rosamund Herbert

A History of Embryology. Edited by T. J. Horder, J. A. Witkowski and C. C. Wylie. Pp. 477. Cambridge University Press. 1986. £60.00 (\$99.50)

At the meeting of the British Society for Developmental Biology at Nottingham in April 1983 papers were presented on historical aspects of embryology. This volume contains the revised version of the papers and it will certainly prove to be a most valuable addition to the rather sparse literature on the history of embryology. J. Needham, who in the 1930s helped to develop chemical embryology and published a *History of Embryology* (1934), has appropriately been asked to write the Preface. From this it appears it was unfortunately not possible to include Jane